



Mathematics Interventions: Best Practices, Needs Assessment and Instructional Materials

Florida Organization of Instructional Leaders (FOIL)

May 2024



What Will you Gain from this Session?

- Participants will:
 - Discuss best practices for providing mathematics interventions for students who have been identified as having a substantial deficiency in mathematics for Grades K-4.
 - Learn about the process and timeline for the 2024-2025 adoption for K-4 Intervention Materials.



FLORIDA DEPARTMENT OF
EDUCATION
fldoe.org

Mathematics Deficiency and Parental Notification

[Section 1008.25\(6\)\(a\)](#), Florida Statutes

Mathematics Deficiency and Parental Notification

- Any student in kindergarten through grade 4 who exhibits a substantial deficiency in mathematics or the characteristics of dyscalculia must:
 - Be provided systematic and explicit mathematics instruction to address his or her specific deficiencies.
 - Be monitored, and instruction must be adjusted based on student's need.
 - Be monitored for their math proficiency, and intensive interventions must continue until the student demonstrates grade level proficiency in a manner determined by the district.

Section 1008.25(4)(b)3., F.S., Assessment and support.

- Outlines that an individualized progress monitoring plan shall include at a minimum:
 - The student's specific, identified mathematics skill deficiency;
 - Goals and benchmarks for student growth in mathematics;
 - A description of the specific measures that will be used to evaluate and monitor the student's mathematics progress;
 - Strategies, resources and materials that will be provided to the student's parent to support the student to make mathematics progress; and
 - Any additional services the student's teacher deems available and appropriate to accelerate the student's mathematics skill development.

Mathematics Deficiency and Parental Notification

- The parent of a student who exhibits a substantial deficiency in mathematics must be notified in writing of the following:
 - That the child has been identified as having a substantial deficiency in mathematics, including a description and explanation of the nature of their difficulty in learning;
 - A description of the current services that are provided to the child;
 - A description of the proposed intensive interventions and supports that will be provided to the child to remediate the deficiencies; and
 - Strategies through a home-based plan the parent can use in helping the child succeed in mathematics.

Mathematics Deficiency and Parental Notification

- The Florida Department of Education (FDOE) shall provide a list of state examined and approved mathematics intervention programs, curricula, and high-quality supplemental materials that may be used to improve a student's mathematics deficiencies.

Determining Substantial Math Deficiency

- [Rule 6A-6.0533](#), Florida Administrative Code (F.A.C.)
 - Provides guidelines to determine whether a student in kindergarten through grade 4 has a substantial math deficiency.
 - Students identified based upon the rule guidelines will receive interventions to support achieving grade-level proficiency as described in section (s.) 1008.25, Florida Statutes (F.S.).

Determining Substantial Math Deficiency

- [Rule 6A-6.0533](#), F.A.C.
 - A student is identified as having a substantial deficiency in mathematics if the following criteria are met for each grade level: student scores below the tenth (10th) percentile based upon screening, diagnostic assessments, progress monitoring, other classroom data, or statewide assessments pursuant to s. 1008.25(6), F.S.; or if through teacher observation, the student has demonstrated minimum skill levels for mathematics competencies in one or more of the areas of emphasis for that grade level.



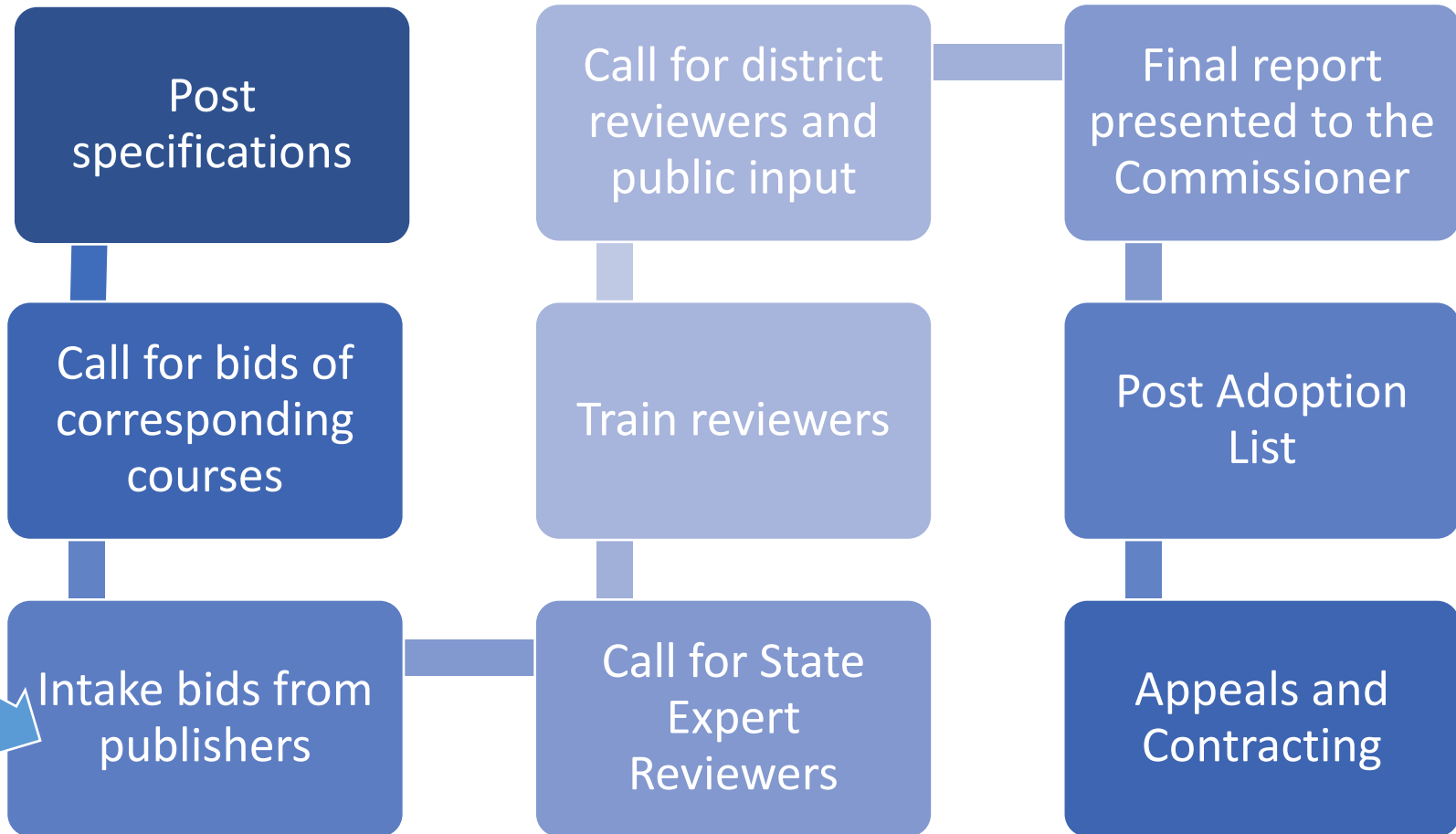
FLORIDA DEPARTMENT OF
EDUCATION
fldoe.org

2024-2025 K-4 Mathematics Intervention Materials Adoption

2024-2025 Adoption

- The intent to bid for K-4 mathematics intervention materials closed on May 10, 2024:
 - 65 intent to bids were submitted.

2024-2025 Adoption Timeline





FLORIDA DEPARTMENT OF
EDUCATION
fldoe.org

House Bill (HB) 7039 Needs Assessment

Needs Assessment

- HB 7039 appropriated funds to FDOE to implement the changes.
- Through the needs assessment, districts will have the opportunity to identify intervention programs and/or professional learning the assist in the implementation of HB 7039 requirements.
- FDOE is currently developing the needs assessment that will be utilized to allocate funds in 2024-2025 school year.



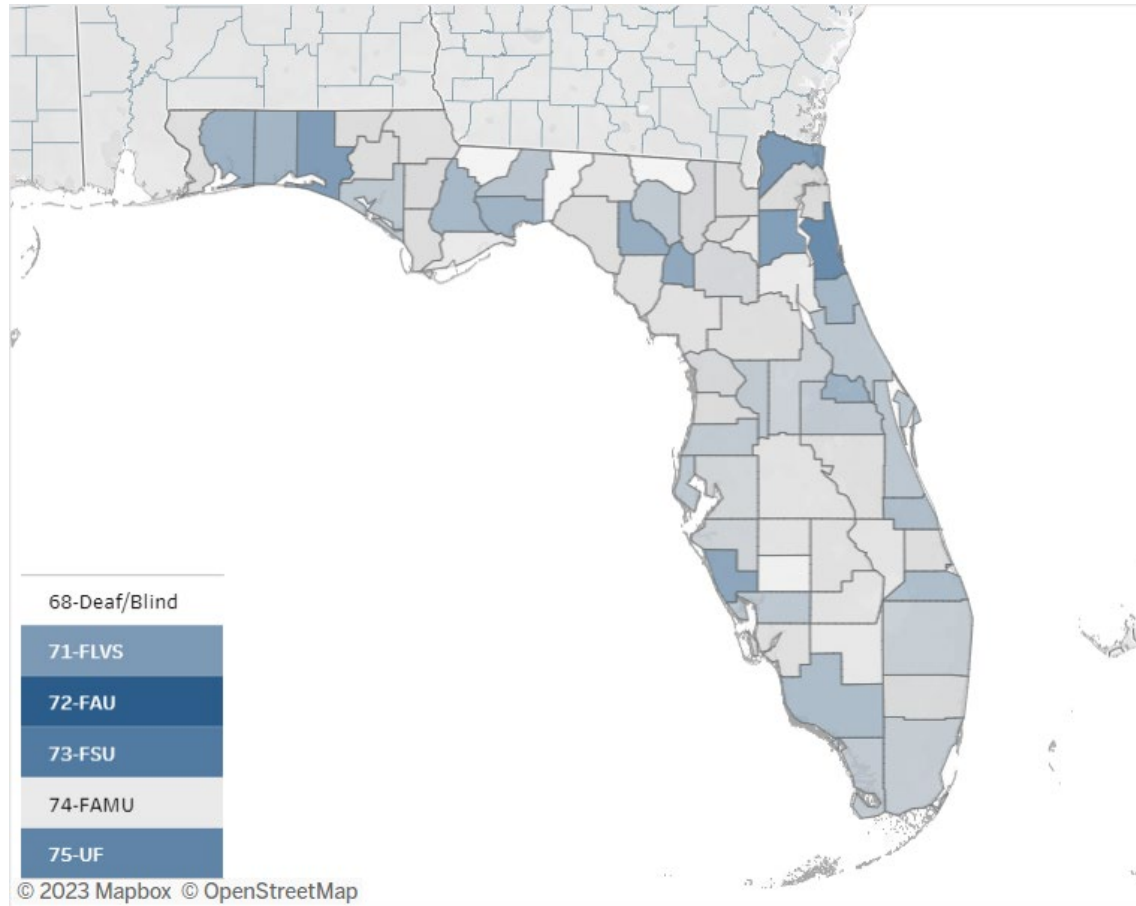
FLORIDA DEPARTMENT OF
EDUCATION
fldoe.org

Recommendations for Preparing Teacher Candidates and Identifying Mathematics Training and Professional Learning Opportunities

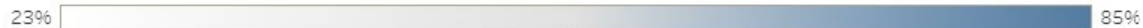
Recommendations

- House Bill 7039 (2023) amended s. 1004.86, F.S., to require recommendations to the legislature for preparing teacher candidates and identifying mathematics training and professional learning opportunities for teachers in kindergarten through grade 4 and administrators who support teachers in the classroom.

Students Data on Statewide Mathematics Assessment for the 2021-2022 school year



% of Students at Achievement: Level 3 and Above



Recommendations

- Recommendation 1. Require common mathematics courses for all elementary education initial state-approved teacher preparation programs.
- Recommendation 2. Require the Department to develop a Mathematics Endorsement and a Mathematics Coaching Endorsement to strengthen teacher content knowledge for those teachers currently certified and teaching in public schools.

Recommendations

- Recommendation 3. Require the Department to build a structure for State Regional Mathematics Directors.
- Recommendation 4. Require the Department to provide professional learning opportunities for teachers and administrators on high-quality mathematics instruction and selecting and providing mathematics interventions.
- Recommendation 5. Require school districts to develop policies for uninterrupted mathematics instruction in grades K-5.



FLORIDA DEPARTMENT OF
EDUCATION
fldoe.org

Providing Mathematics Interventions



Florida's

MATH FORMULA FOR SUCCESS

$$5 + 5 + T1 + T2 + T3$$

5

CHARACTERISTICS OF HIGH-QUALITY MATH INSTRUCTION

Horizontally and Vertically Aligned
Balanced Instructional Approaches
Student-Centered
Instruction Informed by Assessment
Implements Tiered Instruction

5

TYPES OF ASSESSMENTS

Screening
Progress Monitoring
Diagnostic
Formative
Summative

T1

INSTRUCTION FOR ALL STUDENTS

Systematic
Scaffolded
Differentiated
Corrective Feedback
Explicit
Inquiry-Based

T2

SUPPLEMENTAL FOR STUDENTS NEEDING ADDITIONAL SUPPORT

Systematic
Small Group Scaffolded Instruction
Multiple Differentiated Opportunities to Practice Targeted Skill(s)
Corrective Feedback
Explicit
Frequent Progress Monitoring
Occurs in Addition to Tier 1

T3

TARGETED INTENSIVE FOR STUDENTS WITH SUBSTANTIAL MATH DEFICIENCY

Systematic
Small Group and/or One-One Scaffolded Instruction
More Differentiated Guided Practice
Immediate Corrective Feedback
Explicit
More Frequent Progress Monitoring
Occurs in Addition to Tier 1 and Tier 2

The B.E.S.T. Instructional Guides for Mathematics (BIG-M) include ways to provide access for ALL students, including students with disabilities (SWD) and English Language Learners (ELL), and incorporate Universal Design for Learning (UDL) principles.

What is Tiered Instruction?

- Tiered instruction and intervention is a critical component of an effective multi-tiered system of support (MTSS).
- Tiered Instruction is a three-tiered model of intervention and instruction that organizes instructional resources on a continuum of increasing intensity. Instruction can be intensified based on student need by increasing time, narrowing the focus to specific barrier skills and/or reducing the size of the group.

What is Systemic Instruction?

- Systematic instruction is a highly structured, organized sequence of teaching that introduces and reinforces new concepts, strategies and skills and aims to ensure a cumulative progression of learning from simple to complex.
- This approach decreases the possibility of a student developing a math deficiency over time and builds a foundation for future learning.

What is Explicit Instruction?

- Explicit instruction is highly structured and intentional teaching, with clear objectives. Through purposeful presentation to students of the concepts, strategies and skills necessary to master learning objectives, the instruction models thinking and problem-solving skills.
 - This approach can be implemented as needed in whole groups, small groups or individually.
- Explicit instruction contributes to student learning by minimizing proximal gaps and student misconceptions.

When Should Interventions, as Described in Section 1008.25(6), F.S., be Provided?

- Students should receive intervention immediately after being identified as having a substantial reading deficiency or having the characteristics of dyscalculia. Intervention should not be delayed until a student receives a failing grade or until a full and individual evaluation for a possible learning disability, such as dyscalculia, is initiated or completed.

What if a Student Identified as Having a Substantial Deficiency in Mathematics is Already Receiving Math Intervention?

- Progress monitoring data (i.e., student response to intervention data) should be carefully reviewed to ensure that the student is responding positively to the instruction/intervention that is being provided.
 - If data indicate that the student is responding positively (i.e., student response to intervention data indicate that the gap between the student's current level and expected level of performance is closing), then the intervention(s) should be continued in accordance with s. 1008.23(6), F.S.
 - If data indicate a questionable or poor response to intervention, intervention fidelity should be examined to ensure that instruction is being provided as intended.

Can the Interventions Required by s. 1008.25(6), F.S., Occur Within Tier 1 or are Those Supports Limited to Tiers 2 and 3?

- Tier 1 (core) includes instruction that is delivered to all students. When data indicate that majority of students need more supports, Tier 1 interventions should be provided.
- Tier 2 (supplemental) and Tier 3 (intensive) interventions should be provided in addition to Tier 1 (core) mathematics instruction. When data indicate that a student needs the more intensive supports of Tier 2 and/or Tier 3, those interventions should be provided in addition to, not in place of, Tier 1.



FLORIDA DEPARTMENT OF
EDUCATION
fldoe.org

Engagement Activity

Turn and Talk

- Think about how your district currently provides and communicates mathematics interventions.
 - Based on the information today, what is one thing you would change?
- How can we as leaders ensure that high-quality mathematics instruction and interventions are implemented with fidelity?
 - What is one barrier to implementing high-quality mathematics instruction and interventions with fidelity?

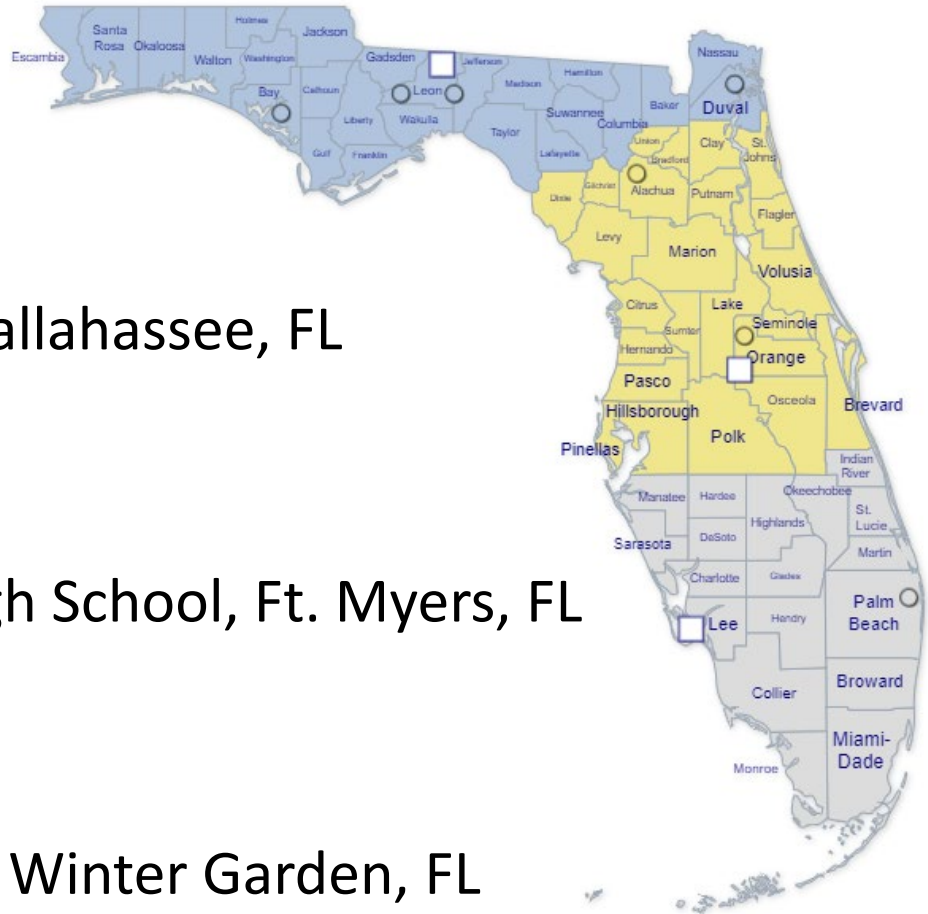


FLORIDA DEPARTMENT OF
EDUCATION
fldoe.org

Upcoming Professional Learning

Summer Professional Learning Event Series

- North
 - June 25-27, 2024
 - Chiles High School, Tallahassee, FL
- South
 - July 9-11, 2024
 - South Fort Myers High School, Ft. Myers, FL
- Central
 - July 16-18, 2024
 - Horizon High School, Winter Garden, FL



Summer Professional Learning Event Series

- During the event, Florida mathematics, computer science, personal financial literacy and civics educators will come together for explicit, systematic training on the content and implementation of:
 - The B.E.S.T. Mathematics Standards for grades K-12 and for school leadership;
 - Florida's state academic standards for computer science for grades K-12 and for school leadership;
 - Florida's state academic standards for personal financial literacy grades 9-12 and for school leadership; and
 - Florida's state academic standards for civics and government grades K-12 and for school leadership.

Summer Professional Learning Event Series

- For mathematics, participants will be able to register for one of the following tracks: K-2, 3-5, 6-8, 9-12 or Leadership.
- General registration is on a first-come, first-served basis and will be open until the week before each event.

<https://www.floridalearns.org/2024/summer/>



Please complete the following survey to help us better understand how we can support you and your teachers!



www.FLDOE.org

